The Critical Edge

News about the CSPA from the DES Shoreland Program

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

February 2009

DES Proposes Changes to the CSPA and New Shoreland Rules

Changes to the way the reference line is determined and the elimination of the dwelling unit limit, are among the changes proposed by DES in LSR 656 and sponsored by Senator Fuller Clark.

Currently, for lakes and ponds, one of the criteria used to determine the reference line is whether or not the lake or pond is impounded (dammed). Right now, for impounded water bodies the reference line is either the waterline at full pond as determined by the spillway crest or the elevation of any flowage rights that are associated with the dam. This creates confusion and extra work for applicants owning property on impounded water bodies who apply for shoreland permits because they must research spillway crest elevations and determine if there are any flowage rights. To eliminate this extra step and for consistency, DES is proposing that the reference line for all lakes and ponds (whether or not they are impounded) be the surface elevation as listed in the *DES Official List of Public Waters*. This will combine impounded and natural water bodies into one category and eliminate the need for property owners on impounded water bodies to engage in additional an often time consuming research.

In addition, DES is proposing to eliminate the dwelling unit density limit in RSA 483-B:9,V (e). Applicants for shoreland permits will also be pleased to know that with the adoption of new shoreland administrative rules in December, 2008, the requirement for a stamped surveyed plan has been eliminated. The new rules also establish a 10 year permit for public infrastructure maintenance, and changes to accessory structure limitations and clarifications to and additions to the list of activities that do not require a shoreland permit. To view all of the changes, please visit http://des.nh.gov/organization/commissioner/legal/rulemaking/documents/env-wq1400amd.pdf.

DES Workshop on the Comprehensive Shoreland Protection Act Successful

The Shoreland Program held a workshop on the Comprehensive Shoreland Protection Act on January 21, 2009 at the Sheraton Harborside in Portsmouth, N.H. This was an opportunity to learn about the new permitting requirements, how to better handle stormwater runoff on your property, and how to stabilize and restore shorelines. Issues specific to the coastal region were included in the presentations. DES staff and professionals from across the state conducted the presentations. Several vendors including, manufacturers and retailers of new pervious technologies, non-profit

Save the Date

Land Resource Management Workshops

March 6 and 27

8:30 a.m. to 4:00 p.m.

NH Department of Environmental Services

29 Hazen Drive

Concord, NH

Register online at www.des.nh.gov

organizations, nurseries, landscapers and DES programs had displays.

The Shoreland Program is currently scheduling additional workshops throughout the state. If you are interested in attending upcoming workshops or have in interest in providing information relative to best management shoreland developments practices or pervious technologies contact the Shoreland Program via the contact information provided below.

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For more information, please contact
Ray Reimold, at (603) 271-0649 or
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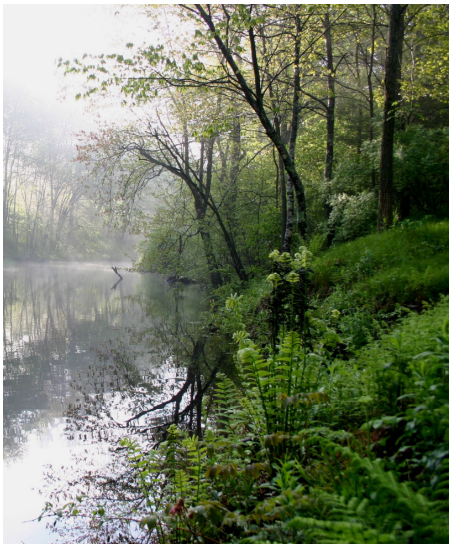
Other Upcoming Shoreland Program Events

The Connecticut River Joint Commissions is sponsoring several PowerPoint presentations across the state that will be held in the towns of Piermont, Chesterfield, Littleton, Columbia and Claremont. The presentations will be given by Jay Aube of the DES Shoreland Program. Details on these upcoming events can be found at: http://www.crjc.org/calendar2.htm



Vegetation that overhangs the water provides shade helping to keep water temperatures cooler and nuisance aquatic weeds in check. Photo by Paul Lockwood, DES.

The Waterfront and Natural Woodland Buffer

The provisions for vegetated buffers are one of the primary ways the CSPA protects water quality. Native vegetation consisting of trees, saplings, shrubs, and ground cover, perform important functions that protect the water quality and aquatic systems of New Hampshire's lakes and rivers. We don't usually think of vegetation as a "service provider" but when native plants are assembled together as a buffer, they can prevent erosion, stabilize and shade the shoreline, absorb excess nutrients, help to recharge groundwater, and provide wildlife habitat. These important ecosystem services keep our waters clean. The value of clean water cannot be overstated. Clean water is an important component of the state's economy, it helps to maintain shorefront property values, and adds to the quality of life for everyone in the state

Did you Know?

$ Visitor days by anglers, boaters and swimmers total $14.9 million or 29 percent of the 51.4 visitor days per year in the state.

$ Annual sales generated by anglers, boaters and swimmers is over 379 million. This exceeds revenues from Laconia's Bike Week, two annual NASCAR events, off-highway vehicles spending and spending at agriculture fairs.

$ Nearly 6,000 fulltime and seasonal jobs are generated by these activities.

What are the vegetation requirements Within the natural woodland buffer (150 feet from the reference line)?

The CSPA establishes a natural woodland buffer (NWB), which extends 150 feet from the reference line. The waterfront buffer (WB) is within the NWB and extends 50 feet from the reference line.

Requirements for managing native vegetation between 50-150 feet depends on the size of the lot that is within the NWB. For lots that have more than half an acre within 150 feet of the reference line, 50 percent of the vegetation exclusive of impervious surfaces, between 50 feet and 150 feet from the reference line, must be maintained in an unaltered state. For lots with a half acre or less within 150 feet of the reference line, at least 25 percent of the vegetation between 50 feet and 150 feet must be maintained in an unaltered state. "Unaltered state" means ***native*** vegetation allowed to grow without cutting, limbing, trimming, pruning, mowing, or other similar activities. Dead, diseased, or unsafe trees, saplings, or shrubs that pose an imminent hazard to structures or have the potential to cause personal injury may be cut. The stumps and root systems must remain intact within 50 feet of the reference line.

What are the vegetation requirements within the waterfront buffer?

Trees and saplings are managed with a grid and points system. The waterfront buffer is divided into 50 foot by 50 foot grid segments. Points are given to trees and saplings according to their diameter at a point 4 ½ feet from the ground. Fifty points of trees and saplings must be maintained in each grid segment. (See the June 2009 issue of the *Critical Edge* for a complete discussion of the grid and points system.)

Tree or Sapling Diameter	Score
1 inch to 6 inches	**1pt**
Greater than 6 inches to 12 inches	**5pts**
Greater than 12 inches	**10pts**

Rocks, root systems and natural groundcover must be left intact in the ground unless the removal is specified as part of a project permitted by DES. **Ground cover may be removed for a 6-foot wide foot path to the water** as long as it does not concentrate storm water runoff or contribute to erosion.

Highbush Blueberry is an attractive native shrub for ground cover.

Natural, or native, ground cover is any herbaceous plant or any woody seedling or shrub generally less than 3 feet in height. It also includes naturally occurring leaf or needle litter, stumps or root systems, small twigs (duff), branches, stones, and boulders. It does not include lawns, invasive species as listed in RSA 430:53,III, exotic species, imported organic or stone mulches, or other artificial materials.

Poison ivy or invasive, exotic species may be removed using hand tools provided that any area exceeding 10 square feet left without vegetation be replanted with native species.

Care should be taken to make a distinction between trees and saplings and shrubs. Trees

and saplings may not be cut down to three feet but can only be removed in accordance with the grid and points system. Examples of trees and saplings include, but are not limited to: maple, beech, ash, white pine, hemlock, red and white oak, red and white cedar, fir, spruce, cherry, black locust. Examples of native shrubs that qualify as ground cover, include but are not limited to: mountain laurel, pussy willow, sweet pepperbush, viburnums, winterberry, and high bush blueberry. Examples of soft stemmed herbaceous ground cover include sarsaparilla, ferns, wintergreen partridge berry, Canada mayflower, and bunchberry.

Bunchberry—a beautiful native groundcover species that flowers in the spring and produces berries in the fall.

Owners of lots that were legally developed prior to July 1, 2008, may maintain but not enlarge cleared areas such as existing lawns and beaches.

Normal trimming, pruning, and thinning of branches is allowed to the extent necessary to protect structures, maintain clearances and provide views. Trimming, pruning, and thinning of branches for the purpose of providing views is limited to the bottom half of the trees and saplings.

Ground cover may also be removed for a temporary 12 foot wide access path if it is necessary for the completion of construction activities related to water dependent structures (such as beaches) or to install a septic system on an island. The access path should be restored and replanted with native vegetation upon completion of the project.

The best plants for natural buffers are those species that are native to the region. Native species are tolerant of the climate conditions, generally resistant to pests and disease, and require less fertilizing. They have these traits because they been growing here for thousands of years and have adapted to the climate, soils, and other native plants species competing for resources.

For these reasons, DES recommends that, wherever possible, native species be used for landscaping within the buffer areas. A list of these species can be found at:

http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/vrap_native_plantings.pdf.

Planting any species on the NH Department of Agriculture's List of Invasive Species is prohibited.

A Word about fertilizers

Fertilizer use within the Protected Shoreland can have disastrous effects on the water body. Outbreaks of algae and other aquatic weeds can occur if phosphorus or nitrogen leach into the water. Algae blooms will ultimately rob the water body of oxygen and can result in problems for many aquatic organisms. In addition, some species of algae are toxic to people and animals.

The CSPA prohibits any fertilizers (except limestone) to be used within 25 feet of the reference line. From 25-250 feet, low phosphate, slow release nitrogen fertilizer may be used. These fertilizers must be guaranteed on the package label to contain not more than 2 percent phosphorous and at least 50 percent slow release nitrogen.

Slow Release Nitrogen Fertilizer contains a nitrogen component which is at least 50% slow release nitrogen. The nitrogen is either:

- Coated with sulfur, plastic or resin; or
- In an insoluble form, e.g., natural organics such as (blood meal);
- Some ureaform and urea-formaldehyde products;
- In soluble form, but slow release:

MDU – methylenediurea;
DMTU– dimethylenetriurea;
DCD – dicyanodiamide

Low Phosphate – 2% or less. Examples combined with nitrogen and potassium:

N P K
4-2-4
3-1-2
3-1-1

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